

PENTAIR STA-RITE

90 GPM Series

Stainless Steel 4" Hi-Flo Submersible Pumps



APPLICATIONS

Water Systems...for residential, industrial, commercial, multiple housing, and farm use.

SPECIFICATIONS

Discharge: 300 grade stainless steel with 2" NPT Threads

Top Bearing: Nylatron®

Top Bearing Journal: 300 grade stainless steel

Diffuser Assembly: Noryl® (20% glass filled)

Impellers: Noryl (20% glass filled)

Bowls: Noryl (20% glass filled)

Diffuser Bearing: Nylatron

Diffuser Bearing Journal: 300 grade stainless steel

Shaft: 300 grade stainless steel, 7/16" hex stock

Coupling: 300 grade stainless steel

Shell: 300 grade stainless steel

Motor Adapter: 300 grade stainless steel

Suction Screen: 300 grade stainless steel

Cable Guard: 300 grade stainless steel

Fastener: 300 grade stainless steel

FEATURES

Discharge: Heavy-duty 300 grade stainless steel construction provides smooth water passage to column pipe. Large wrench flats and rope hole.

Top Bearing: Self-lubricated top bearing ensures long bearing life.

Impellers: 20% glass-reinforced Noryl to resist abrasives and provide smooth water passage for minimal friction loss.

Diffuser Bearing: Bearings at each stage provide radial protection and stability, and excellent resistance to sand damage.

Motor Bracket: 300 grade precision cast stainless steel. Incorporates an efficient hydraulic design for maximum volume and access to motor mounting nuts.

Shaft: 300 grade "treated" stainless steel pump shaft is corrosion-resistant. The hex shape offers generous impeller drive surfaces.

Motor Coupling: Pressed-on, sintered 300 grade stainless steel for maximum corrosion resistance provides trouble-free transfer of power between motor and pump shaft.

Shell: Heavy-gauge, 300 series stainless steel pump shell is durable and offers high corrosion resistance.

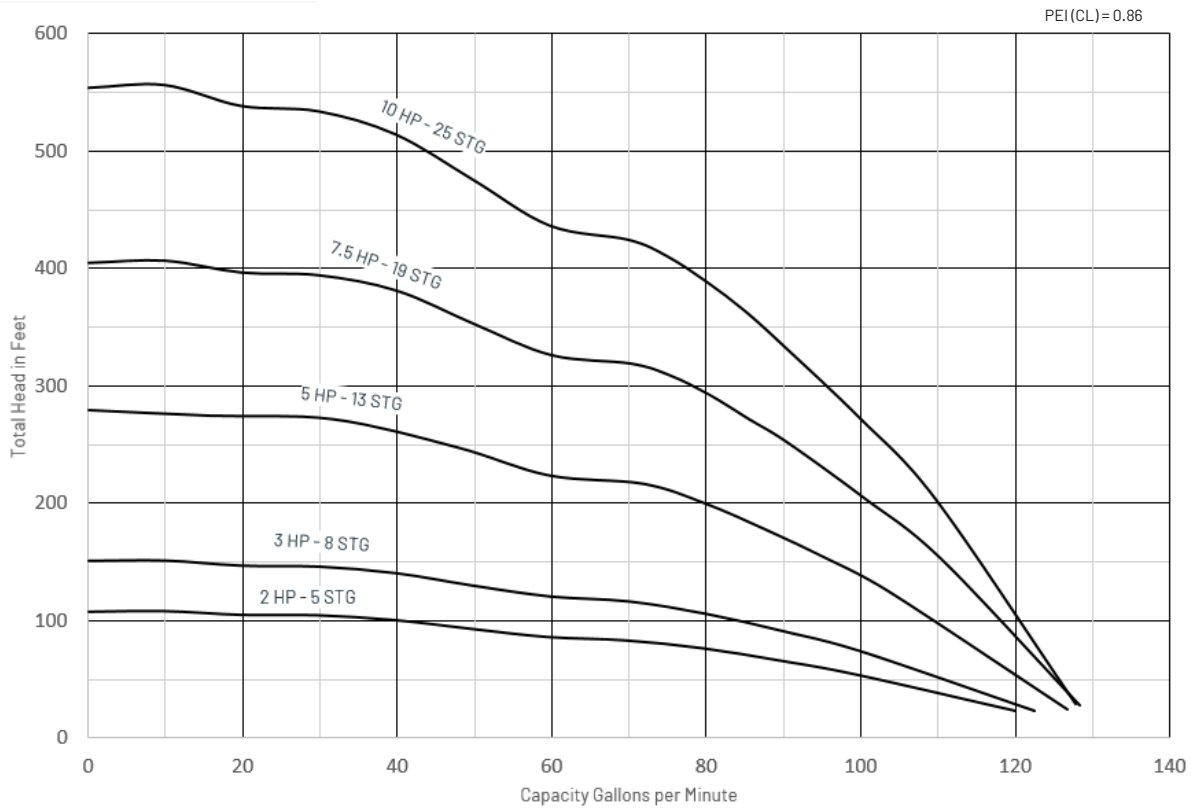
Intake Screen: 300 series stainless steel material offers maximum corrosion resistance and protects against damaging solids entering the pump.

The 90 GPM Stainless Steel 4" High-Flo Submersible Pumps deliver efficient and dependable performance even in rough, aggressive water. New stack design delivers better efficiency and head per stage than previous model.

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PUMP PERFORMANCE



Tested and rated in accordance with Water Systems Council Standards.

Pumps installed with a Pro-Source[®] tank require a 100 PSI relief valve. Pumps installed with a conventional tank require a 75 PSI relief valve. Relief valve must be capable of relieving entire flow of pump at relief pressure.

Check valve sold separately.

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| PUMP PERFORMANCE (Capacity in gallons per minute) | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-----|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|-----|------|-----|
| HP | PSI | PUMPING DEPTH IN FEET | | | | | | | | | | | | | | | | | | | SHUT-OFF HEAD | | | |
| | | 20 | 40 | 60 | 80 | 100 | 125 | 150 | 175 | 200 | 225 | 250 | 275 | 300 | 325 | 350 | 375 | 400 | 425 | 540 | 475 | 500 | FEET | PSI |
| 2 | 0 | - | 110 | 94 | 75 | 39 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 107 | 46 | |
| | 20 | 90 | 59 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | |
| | 30 | 53 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | |
| | 40 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | |
| | 50 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | |
| | 60 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | |
| 3 | 0 | - | 115 | 107 | 96 | 84 | 54 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 151 | 65 | |
| | 20 | 104 | 93 | 80 | 53 | 30 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | |
| | 30 | 91 | 78 | 50 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | |
| | 40 | 75 | 47 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | |
| | 50 | 45 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | |
| | 60 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | |
| 5 | 0 | - | - | 119 | 115 | 110 | 104 | 97 | 89 | 80 | 59 | 46 | - | - | - | - | - | - | - | - | - | 279 | 120 | |
| | 20 | - | 113 | 108 | 103 | 98 | 90 | 81 | 63 | 48 | 32 | - | - | - | - | - | - | - | - | - | - | | | |
| | 30 | 112 | 108 | 102 | 97 | 91 | 82 | 69 | 49 | 34 | - | - | - | - | - | - | - | - | - | - | - | | | |
| | 40 | 107 | 102 | 96 | 90 | 83 | 72 | 50 | 36 | - | - | - | - | - | - | - | - | - | - | - | - | | | |
| | 50 | 100 | 95 | 89 | 82 | 73 | 51 | 37 | - | - | - | - | - | - | - | - | - | - | - | - | - | | | |
| | 60 | 94 | 87 | 81 | 70 | 52 | 39 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | |
| 7-1/2 | 0 | - | - | - | 121 | 119 | 115 | 111 | 106 | 101 | 96 | 91 | 84 | 78 | 61 | 51 | 43 | - | - | - | - | 407 | 176 | |
| | 20 | - | - | 118 | 115 | 111 | 107 | 102 | 97 | 92 | 85 | 79 | 68 | 52 | 44 | - | - | - | - | - | - | | | |
| | 30 | - | 117 | 114 | 111 | 107 | 103 | 98 | 92 | 86 | 80 | 71 | 53 | 45 | 31 | - | - | - | - | - | - | | | |
| | 40 | 117 | 114 | 110 | 107 | 103 | 98 | 93 | 87 | 81 | 72 | 53 | 46 | 33 | - | - | - | - | - | - | - | | | |
| | 50 | 113 | 110 | 106 | 103 | 98 | 93 | 87 | 81 | 73 | 54 | 46 | 34 | - | - | - | - | - | - | - | - | | | |
| | 60 | 109 | 106 | 101 | 98 | 94 | 88 | 81 | 74 | 55 | 47 | 35 | - | - | - | - | - | - | - | - | - | | | |
| 10 | 0 | - | - | - | - | 121 | 118 | 116 | 113 | 110 | 107 | 103 | 100 | 96 | 92 | 87 | 83 | 77 | 69 | 56 | 50 | 44 | 556 | 240 |
| | 20 | - | - | - | 118 | 116 | 113 | 110 | 109 | 104 | 100 | 96 | 92 | 88 | 83 | 78 | 71 | 57 | 51 | 45 | 37 | - | | |
| | 30 | - | - | 118 | 116 | 114 | 111 | 108 | 104 | 100 | 96 | 92 | 88 | 84 | 79 | 72 | 57 | 51 | 46 | 38 | - | - | | |
| | 40 | - | 118 | 116 | 114 | 111 | 108 | 104 | 101 | 97 | 92 | 89 | 84 | 79 | 73 | 58 | 51 | 46 | 39 | - | - | - | | |
| | 50 | 118 | 115 | 113 | 111 | 108 | 105 | 101 | 97 | 93 | 89 | 84 | 80 | 73 | 58 | 52 | 47 | 40 | - | - | - | - | | |
| | 60 | 115 | 113 | 110 | 108 | 105 | 101 | 98 | 93 | 89 | 85 | 80 | 74 | 59 | 53 | 47 | 40 | - | - | - | - | - | | |

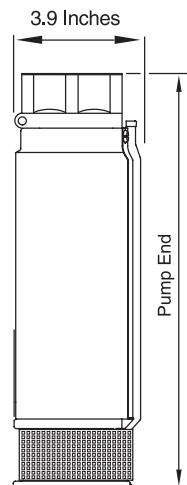
CAUTION: DO NOT use pump at flow rates indicated by the symbol '—'. To do so can cause premature failure of unit. Pump warranty void when failure occurs under these conditions.

ORDERING INFORMATION

| MOTOR TYPE | HP | STGS. | PH | VOLT | PUMP END | | | MOTOR | | CONTROL BOX | |
|------------|-------|-------|----|------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | | | | | CATALOG NUMBER | LENGTH INCHES* | WEIGHT POUNDS* | CATALOG NUMBER | WEIGHT POUNDS* | CATALOG NUMBER | WEIGHT POUNDS* |
| 3 WIRE | 2 | 5 | 1 | 230 | L90HF20-01 | 22 | 15 | P43B0020A2 | 31 | SMC-CR2021 | 7 |
| | | | 3 | 230 | L90HF20-01 | 22 | 15 | P43B0020A3 | 28 | | |
| | | | 3 | 460 | L90HF20-01 | 22 | 15 | P43B0020A4 | 28 | | |
| | 3 | 8 | 1 | 230 | L90HF30-01 | 32-1/8 | 17 | P43B0030A2 | 40 | SMC-CR3021 | 7 |
| | | | 3 | 230 | L90HF30-01 | 32-1/8 | 17 | P43B0030A3 | 32 | | |
| | | | 3 | 460 | L90HF30-01 | 32-1/8 | 17 | P43B0030A4 | 32 | | |
| | 5 | 13 | 1 | 230 | L90HF50-01 | 48-7/8 | 22 | P43B0050A2 | 70 | SMC-CR5021 | 8 |
| | | | 3 | 230 | L90HF50-01 | 48-7/8 | 22 | P43B0050A3 | 55 | | |
| | | | 3 | 460 | L90HF50-01 | 48-7/8 | 22 | P43B0050A4 | 55 | | |
| | 7-1/2 | 19 | 3 | 230 | L90HF75-01 | 69-1/8 | 33 | P43B0075A3 | 70 | | |
| | | | 3 | 460 | L90HF75-01 | 69-1/8 | 33 | P43B0075A4 | 70 | | |
| | 10 | 25 | 3 | 460 | L90HF100-01 | 89-3/8 | 46 | P43B0100A4 | 78 | | |

*Length and Weight are approximate. NOTE: Pump end and motor purchased separately. Check valve sold separately.

OUTLINE DIMENSIONS



Dimensions (in inches) are for estimating purposes only.

For lengths, refer to Ordering Information table.



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